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First record of Scarlet-thighed Dacnis, *Dacnis venusta* (Lawrence, 1862) (Aves: Thraupidae) for the middle Magdalena valley of Santander, Colombia

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Abstract: We report the first record of the Scarlet-thighed Dacnis (*Dacnis venusta*) for middle Magdalena valley in the department of Santander, Colombia. This record extends the range of the species more than 185 km to the east of its previously known distribution. This observation is part of a project to monitor the fauna in the influence zone of the Topocoro dam and shows the importance of studying fragmented ecosystems and less frequently sampled sites such as the Serranía de la Paz.

Key words: Neotropics; new record; range extension; Serranía de la Paz; Topocoro dam

The Scarlet-thighed Dacnis, *Dacnis venusta* (Lawrence, 1862) is a tanager (Thraupidae) distributed at altitudes from sea level to 1,000 m in Panama, Colombia and Ecuador and to 1200 m in Costa Rica. In Colombia, it is principally distributed between the Pacific coast and the Cordillera Occidental of the Andes, and across the Cordillera Central at the department of Antioquia (Hilty & Brown 1986; McMullan et al. 2014); recent observations come close to the middle Magdalena River Valley (MMRV) on its most eastern distribution in the town of Anorí (Sullivan et al. 2009; Donegan & Salaman 1999) and an isolated observation record from municipality of Santa Rosa de Cabal (department of Risaralda) (BirdLife International 2012; SIB Colombia 2012). The only known records of this species from ornithological collections in Colombia are from Valle and Nariño universities (Universidad de Nariño 2012; Universidad del Valle 2014). This species is fairly common in the humid and very humid forests, secondary growths, and plantations of the Pacific lowlands where it inhabits forest edges with scattered trees. It shows both solitary and group behavior, forming both pairs and mixed flocks (Hilty & Brown 1986; Restall et al. 2006). It has been recorded interacting with other tanager species, including Silver-throated Tanager [*Tangara icterocephala* (Bonaparte, 1851)], Bay-headed Tanager [*Tangara gyrola* (Linnaeus, 1758)], Blue-gray Tanager [*Thraupis episcopus* (Linnaeus, 1766)], and Palm Tanager [*Thraupis palmarum* (Wied, 1821)]. It has been observed feeding on Cecropia (*Cecropia* sp.) and Ficus (*Ficus* sp.) trees with other frugivorous birds (Daily & Ehrlich 1994). The MMRV is a tectonic depression indicted between the central and eastern Andean mountain ranges, which extends through several departments in Colombia following the Magdalena River (Mojica & Franco 1990). Its vegetation type is the Tropical Humid Forest (Etter et al. 1998). The MMRV is highly biodiverse, but because of its importance for Colombia's economic development, it has undergone huge landscape transformation, principally from the conversion of forests into pastures, farm fields, and roads. All this leads to a huge potential loss of biodiversity, along with community structure and compositional changes in the remnant forests patches (Etter et al. 2006; Rodríguez & Etter 2008; Cortes 2013).

Deforestation in the MMRV has also resulted in the expansion of open-country species from the Caribbean lowlands, as well as other species that have apparently crossed the Andes due to the loss of montane forest. Several species in the country have been recorded outside their historic ranges in recent years (Stiles & Roselli 1999; Laverde et al. 2005; Casas-Cruz & Ayerbe-Quiñones 2006; Strewe et al. 2006; Donegan et al. 2007; Ruiz-Guerra et al. 2007; Armesto et al. 2013; Avendaño et al. 2013). For instance, given the high rate of deforestation in the MMRV, it has been suggested that the increased species counts of the avifauna is due to several species extending their range following the pattern of deforestation track in the Cordillera Oriental, a pattern that may become more common over the next decades (Avendaño et al. 2013).

Between the months of March and November of 2016, we carried a faunal monitoring project, surveying six localities with similar vegetation conditions, within the area influenced by the Topocoro hydroelectric, which dams the Sogamoso River between the Serranía de la Paz and

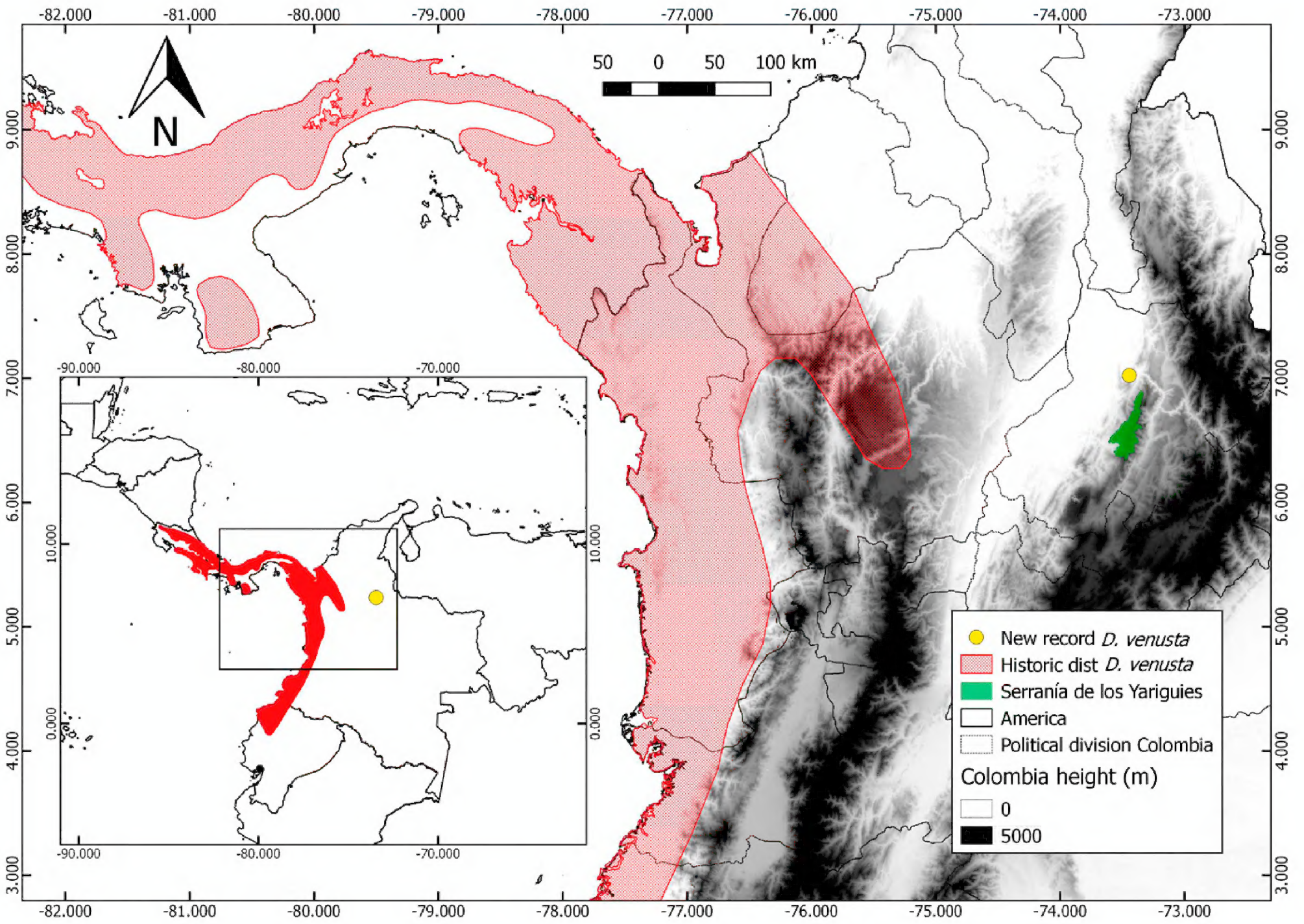

Figure 1. Map of the historical distribution of Scarlet-thighed Dacnis (*D. venusta*) and the new record in the department of Santander (yellow circle). (Datum: WGS84).

Cerro La Aurora, a mountainous area, in the Santander side of the MMRV. In this project, we recorded 360 birds species, including several MRRV endemics and threatened species. The records of *D. venusta* shown here were made from 18–20 March 2016 on La Mantecosa River at Vereda La Putana, Aguamieluda alta sector, municipality of Betulia, department of Santander (07°01′24.30″ N, 073° 26′41.40″ W; elev. 740 m) (Figure 1). La Mantecosa River is part of the Sogamoso watershed, which flows into the east margin of the Magdalena River, north of the western slope of the Serranía de la Paz. To the southeast, this serranía connects to Serranía de los Yariguíes Natural National Park.

Dacnis venusta presents sexual dimorphism. The male has a shiny red iris and a brilliant turquoise-blue plumage on the head, neck, shoulders and back; the lore, throat, wings and tail are black; the flanks are greenish-black, and the thighs are scarlet red. The female has a similar pattern, but with duller colors (Skutch 1962; Hilty & Brown 1986). A male and a female were observed and photographed on two different days, which allowed us to confirm the identification considering that Black-Faced Dacnis [*D. lineata* (Gmelin, 1789)], Blue Dacnis [*D. cayana* (Linnaeus, 1766)] and Blue-necked Tanager [*Tangara cyanicollis* (d'Orbigny & Lafresnaye, 1837)], which are similar in plumage and behavior were also recorded on this locality (Figure 2).

The recorded individuals of *D. venusta* were on a high stubble patch with at least 15 years of regeneration (tallest trees of 10 m high on average), bordered by huge extensions of mature secondary growth forest present at the highest and steepest parts of the Serranía de la Paz. They were in a fruiting tree of the genus *Laetia* sp., about 7 m high (Figure 2). The birds were part of a mixed flock composed by Green Honeycreeper [*Chlorophanes spiza* (Linnaeus, 1758)], Red-legged Honeycreeper [*Cyanerpes cyaneus* (Linnaeus, 1766)], Blue Dacnis, Black-faced Dacnis, Blue-necked Tanager, Yellow-backed Tanager [*Hemithraupis flavicollis* (Vieillot, 1818)], Bananaquit [*Coereba flaveola* (Linnaeus, 1758)], and Bay-breasted Warbler [*Setophaga castanea* (Wilson, 1810)]. They were seen feeding actively and making acrobatic jumps and short flights solely on the twigs of this tree for ca. 10 min (Figure 2). This record represents a range extension of ca. 185 km east of the closest record in the municipality of Remedios, department of Antioquia in the west margin of the Magdalena River. It also represents the first records for this species in the east margin of the Magdalena River, and the department of Santander (Figure 1). We recommend giving special attention to the presence of this species in sites with similar vegetation conditions,

Figure 2. Individuals of the Scarlet-thighed Dacnis from Betulia, Santander. **A.** Male. **B.** Female. **C.** Scarlet-thighed Dacnis and Black-faced Dacnis (*D. lineata*) feeding on the same tree (*Laetia* sp.). Photos: Fernando Cediel.

especially along the Serranía de la Paz, a mountain range that has been poorly studied (Donegan et al. 2010), and has plenty of forests patches with similar conditions to the one described here. It may be possible to find the species at the foothills of the Natural National Park Serranía de los Yariguíes, where the vegetation is in better condition. The species was not recorded in any of the other localities of the monitoring project, which suggests that *D. venusta* is uncommon here and that it has likely not crossed the Serranía de la Paz. Scarlet-thighed Dacnis may be showing a similar range extension, as is the endemic and Vulnerable Turquoise Dacnis [*Dacnis hartlaubi* (Sclater, 1855)] (Renjifo et al. 2014), which had a localized distribution in Colombia (Hilty & Brown 1986) but in recent decades has increased in the number of records, as new populations were documented along the Central and Eastern Cordilleras and Magdalena valley (Stiles et al. 1999; Donegan et al. 2007). We suggest that the species of *Dacnis* could be following deforestation, tracking forest borders, clearings with scattered trees and shade coffee plantations (Orrego et al. 2002; Renjifo et al. 2002).

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